



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,759	07/09/2003	Kee Yean Ng	70021175-1	2290

7590 04/19/2007  
AGILENT TECHNOLOGIES, INC.  
Legal Department, DLA29  
Intellectual Property Administration  
P.O. Box 7599  
Loveland, CO 80537-0599

EXAMINER
----------

FARAHANI, DANA

ART UNIT	PAPER NUMBER
----------	--------------

2891

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/616,759

Applicant(s)

NG ET AL.

Examiner

Dana Farahani

Art Unit

2891

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. In view of the appeal brief filed on 9/28/06, PROSECUTION IS HEREBY REOPENED.

New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Claim Objections***

2. Claims 7 and 17 are objected to because of the following informalities:

The phrase "...wherein said transparent cap comprises a spherical surface of constant thickness" should be "...whererin said transparent cap comprises a spherical surface and has a constant thickness" Appropriate correction is required.

3. Claim 18 had never been presented officially during prosecution, and therefore, will not be examined.

***Claim Rejections - 35 USC § 102/103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawae et al., hereinafter Kawae (US Patent Application Publication 2002/0080501), or alternatively, under 103(a) as being unpatentable over Kawae in view of Lowery (US patent 5,959,316).

Kawae discloses in figure 8 a method for fabricating a light source comprising: mounting a chip 3 having a light source on a substrate 8, the primary light source emitting light of a first wavelength; connecting power terminals on the chip to corresponding power terminals 1 and 2 on the substrate; and mounting a preformed transparent cap 7 over the chip, the cap comprising a soluble wavelength-converting material for converting a portion of the light of the first wavelength to a second wavelength.

Kawae further discloses that the preformed, wavelength-converting cap may be formed to take on various desired shape. For example, the cap can have flat walls (e.g. figure 8), but the invention is not so limited. Rather, Kawae expressly states that the preformed wavelength-converting cap of their invention may have the shape similar to that of the spherical surface cap of the prior art (paragraph 42). See paragraph 26 of Kawae stating that the prior art fluorescent cover/cap may have a spherical surface.

Art Unit: 2891

Claim 7, further requires the transparent, spherical cap have a constant thickness. Kawae further discloses that the spherical portion may either have a varying thickness (e.g. figure 7), or a constant thickness (e.g. figure 9). Restated, figure 7's depiction of a varying cap thickness provides evidence that the depiction in figure 9 of a cap with a constant thickness, was intentional. As such the claims are anticipated.

Assuming, *arguendo*, that Kawae must be interpreted so narrowly as not sufficiently disclosing that the cap may have a constant thickness, the claims would not be anticipated. Nevertheless, Lowery discloses in figure 4, an LED covered by a transparent cap 66 comprising a spherical surface of constant thickness (see col. 3, lines 20-32), so it would not be subject to the annular ring problem. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to make the cap in the Kawae reference as a spherical surface of constant thickness to avoid the annular ring problem.

### ***Conclusion***

Prior art made of record, but not relied upon in the above rejections, is considered relevant to applicants' disclosure. See, for example, Tasaki et al., figures 1 and 2, wherein a constant thickness cap is formed, but it does not expressly disclose that the cap is spherical.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Farahani whose telephone number is (571)272-1706. The examiner can normally be reached on M-F 9:00AM - 5:00PM.

Art Unit: 2891

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Baumeister can be reached on (571)272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DF



**B. WILLIAM BAUMEISTER**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**